

What is claimed:

1. A standard interface for interfacing a wireless modem assembly with a host device, comprising:

a primary serial interface configured to support data communication between the host device and the wireless modem assembly;

a secondary serial interface configured to support data communication between the host device and the wireless modem assembly or to support data communication internal to the wireless modem assembly; and

a differential serial interface configured to support data communication between the host device and the wireless modem assembly using a differential signal pair.

2. The standard interface of claim 1, further comprising a power interface and a ground interface to the wireless modem assembly.

3. The standard interface of claim 2, wherein the power interface supports LVTTTL signaling.

4. The standard interface of claim 1, further comprising a wireless modem assembly status interface.

5. The standard interface of claim 1, further comprising at least one ADC input to the wireless modem assembly.

6. The standard interface of claim 1, further comprising a power standby input to the wireless modem assembly.

7. The standard interface of claim 1, further comprising a JTAG interface.

8. The standard interface of claim 1, further comprising a plurality of GPIO.

9. The standard interface of claim 8, wherein the secondary serial interface is multiplexed with at least one of the plurality of GPIO interfaces.

10. The standard interface of claim 1, further comprising a SIM interface configured to support data communication between the host device and a SIM card included in the wireless modem assembly.

11. The standard interface of claim 9, wherein the SIM interface comprises a SIM-DATA, SIM-CLK, SIM-RESET, SIM-REMOVED, and SIM-VCC signals.

12. The standard interface of claim 1, further comprising an audio interface configured to provide a buzzer output to the host device, a speaker output to the host device, a microphone input to the wireless modem assembly, and a digital voice interface between the host device and the wireless modem assembly.

13. The standard interface of claim 12, wherein the speaker output comprises a differential signal pair.

14. The standard interface of claim 12, wherein the microphone input comprises a differential signal pair.

15. The standard interface of claim 12, wherein the digital voice input comprises a DV-CLK, DV-FRAME, DV-TXDATA, and DV-RXDATA signals.

16. The standard interface of claim 1, further comprising a power indicator output to the host device configured to indicate whether the wireless modem assembly is on or off.

17. The standard interface of claim 1, further comprising a sleep mode indicator output to the host device configured to indicate whether the wireless modem assembly is in a sleep mode.

18. The standard interface of claim 1, further comprising a wake up input to the wireless modem assembly configured to interface a wakeup signal to the wireless modem assembly.

19. The standard interface of claim 1, wherein the primary serial interface is optionally included if the differential serial interface is included in the standard interface.

20. The standard interface of claim 1, wherein the primary serial interface supports a maximum data rate of 115Kbps.

21. The standard interface of claim 1, wherein the primary serial interface is a universal serial interface that includes a TXD, RXD, CTS, RTS, DTR, and DSR signals.

22. The standard interface of claim 1, wherein the primary serial interface supports a maximum data rate of 2.5Mbps.

23. The standard interface of claim 1, wherein the primary serial interface supports a minimum data rate of 38.4kbps.

24. The standard interface of claim 1, wherein the secondary serial interface is a universal serial bus interface comprising a TXD2 and RXD2 a signals.

25. The standard interface of claim 1, wherein the secondary serial interface supports a maximum data rate of 115Kbps.

26. The standard interface of claim 1, wherein the secondary serial interface supports a minimum data rate of 38.4Kbps.

27. The standard interface of claim 1, wherein the differential serial interface supports a maximum data rate of 2.5Mbps.

28. The standard interface of claim 1, wherein the standard interface is implemented in a 70-pin connector.

29. A standard interface, comprising:

a basic function interface configured to provide at least one serial data communication interface between a host device and a wireless modem assembly;

a SIM interface configured to provide a data communication interface between the host device and a SIM card included in the wireless modem assembly; and

an audio interface between the host device and the wireless modem assembly.

30. The standard interface of claim 29, wherein the basic function interface further comprises a power and a ground interface to the wireless modem assembly, a wireless modem assembly status interface, at least one ADC input to the wireless modem assembly, a power standby input to the wireless modem assembly, a JTAG interface between the host device and the wireless modem assembly, and a plurality of GPIO inputs/outputs between the host device and the wireless modem assembly

31. The standard interface of claim 29, wherein the audio interface is configured to provide a buzzer output to the host device, a

speaker output to the host device, a microphone input to the wireless modem assembly, and a digital voice interface

32. The standard interface of claim 29 wherein the basic function interface further comprises:

a primary serial interface configured to support data communication between the host device and the wireless modem assembly;

a secondary serial interface configured to support data communication between the host device and the wireless modem assembly or to support data communication internal to the wireless modem assembly; and

an optional differential serial interface configured to support data communication between the host device and the wireless modem assembly using a differential signal pair.

33. The standard interface of claim 30, wherein the power interface comprises:

a power indicator output to the host device configured to indicate whether the wireless modem assembly is on or off;

a sleep mode indicator output to the host device configured to indicate whether the wireless modem assembly is in sleep mode; and

a wake up input to the wireless modem assembly configured to interface a wakeup signal to the wireless modem assembly.

34. The standard interface of claim 32, wherein the primary serial interface is optionally included if the differential serial interface is included in the standard interface.

35. The standard interface of claim 32, wherein the primary serial interface supports a maximum data rate of up to 2.5Mbps if the differential serial interface is not included and a maximum data rate of 115Kbps if the differential serial interface is included.

36. The standard interface of claim 32, wherein the primary serial interface supports a minimum data rate of 38.4Kbps.

37. The standard interface of claim 32, wherein the secondary serial interface is a universal serial bus interface comprising a TXD2 and a RXD2 signals.

38. The standard interface of claim 32, wherein the secondary serial interface supports a maximum data rate of 115Kbps.

39. The standard interface of claim 32, wherein the secondary serial interface supports a minimum data rate of 38.4Kbps.

40. The standard interface of claim 30, wherein the secondary serial interface is multiplexed with at least one of the plurality of GPIO.

41. The standard interface of claim 30, wherein the differential serial interface support a maximum data rate of 2.5Mbps.

42. The standard interface of claim 29, wherein the SIM interface comprises a SIM-DATA, a SIM-CLK, a SIM-RESET, a SIM-REMOVED, and a SIM-VCC signals.

43. The standard interface of claim 29, wherein the standard interface is implemented in a 70-pin connector.

44. The standard interface of claim 43, wherein the connector includes unused pins for future feature expansion.